Title (en)

METHOD OF PREVENTING SULFIDE CORROSION, HIGH-TEMPERATURE MEMBER WITH RESISTANCE TO SULFIDE CORROSION

Title (de)

VERFAHREN ZUR VERHINDERUNG VON SULFIDKORROSION, GEGENÜBER SULFIDKORROSION BESTÄNDIGES HOCHTEMPERATURBAUELEMENT

Title (fr)

PROCÉDÉ POUR EMPÊCHER LA CORROSION PAR LE SULFURE, ÉLÉMENT HAUTE TEMPÉRATURE AVEC UNE RÉSISTANCE À LA CORROSION PAR LE SULFURE

Publication

EP 2130943 A1 20091209 (EN)

Application

EP 08721926 A 20080312

Priority

- JP 2008054510 W 20080312
- JP 2007080715 A 20070327
- JP 2007303585 A 20071122

Abstract (en)

A sulfidation corrosion preventing method for protecting a substrate from sulfidation corrosion, a sulfidation corrosion-resistant high temperature member having excellent sulfidation corrosion resistance, and a method for repairing a heat exchanger tube having cracks are disclosed. A silicon oxide layer is formed on a surface of a substrate; a titanium-containing coating fluid containing a titanium metal or a titanium compound is coated on the silicon oxide layer, heated and oxidized to form a first titanium oxide layer; a carbon layer is formed on a surface of the first titanium oxide layer; and a titanium-containing coating fluid is coated on the carbon layer, heated and oxidized to form a second titanium oxide layer. The substrate is protected or repaired with the silicon oxide layer, the first titanium oxide layer, the carbon layer, and the second titanium oxide layer.

IPC 8 full level

C23C 18/12 (2006.01); **B05D 5/00** (2006.01); **B32B 18/00** (2006.01); **C23C 20/08** (2006.01); **C23C 28/04** (2006.01)

CPC (source: EP US)

B32B 18/00 (2013.01 - EP US); **C23C 8/02** (2013.01 - EP US); **C23C 18/1208** (2013.01 - EP US); **C23C 18/1216** (2013.01 - EP US); **C23C 18/122** (2013.01 - EP US); **C23C 18/1225** (2013.01 - EP US); **C23C 18/1241** (2013.01 - EP US); **C23C 18/127** (2013.01 - EP US); **C23C 26/00** (2013.01 - EP US); **C23C 28/042** (2013.01 - EP US); Y10T 428/30 (2015.01 - EP US)

Cited by

EP4273470A1; FR3135316A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 2130943 A1 20091209; **EP 2130943 A4 20150708**; **EP 2130943 B1 20190911**; CN 101636524 A 20100127; CN 101636524 B 20120104; JP 5110608 B2 20121226; JP WO2008117665 A1 20100715; PL 2130943 T3 20200518; US 2010233483 A1 20100916; WO 2008117665 A1 20081002

DOCDB simple family (application)

EP 08721926 A 20080312; CN 200880009043 A 20080312; JP 2008054510 W 20080312; JP 2009506280 A 20080312; PL 08721926 T 20080312; US 29453608 A 20080512